

032904

Please type a plus sign (+) inside this box → ☐

PTO/SB/05 (12/97)

Approved for use through 9/30/00. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

| | | | |
|--|-----------------|-------------|----|
| Attorney Docket No. | SJO920030102US1 | Total Pages | 29 |
| First Named Inventor or Application Identifier | | | |
| John G. Thompson | | | |
| Express Mail Label No. | ER730013072US | | |

2264 U.S. PTO
10/811664

032904

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form
(Submit an original, and a duplicate for fee processing)
2. ☒ Specification (Total Pages) 23
(Preferred arrangement set forth below)
 - Descriptive title of the Invention
 - Cross References to Related Application
 - Statement Regarding Fed sponsored R & D
 - Reference to Microfiche Appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
3. ☒ Drawing(s) (35 USC 113) (Total Pages) 4
4. Oath or Declaration (Total Pages) 2
 - a. ☒ Newly executed (original or copy)
 - b. ☐ Copy from a prior application (37 CFR 1.63(d))
(for continuation /divisional with Box 17 completed)
[Note Box 5 below]
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation by Reference (useable if Box 4b is checked)
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

ADDRESS TO: Commissioner for Patents
Mail Stop Patent Application
P.O. Box 1450
Alexandria, VA 22313-1450

6. ☐ Microfiche Computer Program (Appendix)
7. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - a. ☐ Computer Readable Copy
 - b. ☐ Paper Copy (identical to computer copy)
 - c. ☐ Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

8. ☐ Assignment Papers (cover sheet & document(s))
9. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☒ Power of Attorney
10. ☐ English Translation Document (if applicable)
11. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS Citations
12. ☐ Preliminary Amendment
13. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
14. ☐ Small Entity Statement filed in prior application, Status still proper and desired
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☒ Other: Express Mail Certificate

17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.:**18. CORRESPONDENCE ADDRESS**☒ Customer Number or Bar Code Label 36491
☐ Or Correspondence address below

| | | | | | |
|---------|--|-----------|--|-----|--|
| NAME | | | | | |
| ADDRESS | | | | | |
| CITY | | STATE | | ZIP | |
| COUNTRY | | TELEPHONE | | FAX | |

Assignee Name: INTERNATIONAL BUSINESS MACHINES CORPORATION
Assignee Residence: Armonk, New York

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Please type a plus sign (+) inside this box → ☐PTO/SB/05 (12/97)
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FEE TRANSMITTAL

Note: Effective October 1, 2001.
Patent fees are subject to annual revision.

Complete If Known

| | |
|------------------------|------------------|
| Application Number | Not Available |
| Filing Date | March 29, 2004 |
| First Named Inventor | John G. Thompson |
| Group Art Unit | |
| Examiner Name | |
| Attorney Docket Number | SJO920030102US1 |

TOTAL AMOUNT OF PAYMENT \$ 1122

METHOD OF PAYMENT (check one)

- 1.
- ☒
- The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

Deposit Account Number: 09-0466

Deposit Account Name: IBM CORPORATION

- ☒
- Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
- ☐
- Charge the Issue Fee In 37 CFR at the Mailing of the Notice of Allowance

- 2.
- ☐
- Payment Enclosed:

☐ Check ☐ Money Order ☐ Other

FEE CALCULATION

1. FILING FEE

| Large Entity | | Small Entity | | Fee Description | Fee Paid |
|--------------|----------|--------------|----------|------------------------|----------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | | |
| 1001 | 770 | 2001 | 385 | Utility filing fee | 770 |
| 1002 | 340 | 2002 | 170 | Design filing fee | |
| 1003 | 530 | 2003 | 265 | Plant filing fee | |
| 1004 | 770 | 2004 | 385 | Reissue filing fee | |
| 1005 | 160 | 2005 | 80 | Provisional filing fee | |

SUBTOTAL (1)

\$ 770

2. CLAIMS

| | | Extra | | Fee from below | | Fee Paid |
|----------------------|--------|-------|---|----------------|---|----------|
| Total Claims | | | | | | |
| 30 | -20 = | 10 | x | 18 | = | 180 |
| Ind. Claims | 5 -3 = | 2 | x | 86 | = | 172 |
| Multiple Dep. Claims | | 0 | x | 290 | = | 0 |

| Large Entity | | Small Entity | | Fee Description |
|--------------|----------|--------------|----------|-----------------------------------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | |
| 1202 | 18 | 2202 | 9 | Claims in excess of 20 |
| 1201 | 86 | 2201 | 43 | Independent claims in excess of 3 |
| 1203 | 290 | 2203 | 145 | Multiple dependent claim |

SUBTOTAL (2)

\$ 352

FEE CALCULATION (continued)

3. ADDITIONAL FEES

| Large Entity | | Small Entity | | Fee Description | Fee Paid |
|--------------|----------|--------------|----------|--|----------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | | |
| 1051 | 130 | 2051 | 65 | Surcharge - late filing fee or oath | |
| 1052 | 50 | 2052 | 25 | Surcharge - late provisional filing fee or cover sheet | |
| 1053 | 130 | 2053 | 130 | Non-English specification | |
| 1812 | 2520 | 1812 | 2520 | For filing a request for reexamination | |
| 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 | 1840* | 1805 | 1840* | Requesting publication of SIR after Examiner action | |
| 1251 | 110 | 2251 | 55 | Extension for reply within first month | |
| 1252 | 420 | 2252 | 210 | Extension for reply within second month | |
| 1253 | 950 | 2253 | 475 | Extension for reply within third month | |
| 1254 | 1480 | 2254 | 740 | Extension for reply within fourth month | |
| 1255 | 2010 | 2255 | 1005 | Extension for reply within fifth month | |
| 1401 | 330 | 2401 | 165 | Notice of Appeal | |
| 1402 | 330 | 2402 | 165 | Filing a brief in support of an appeal | |
| 1403 | 290 | 2403 | 145 | Request for oral hearing | |
| 1451 | 1510 | 1451 | 1510 | Petition to institute a public use proceeding | |
| 1452 | 110 | 2452 | 55 | Petition to revive - intentional | |
| 1453 | 1330 | 2453 | 665 | Petition to revive - unintentional | |
| 1501 | 1330 | 2501 | 665 | Utility issue fee | |
| 1502 | 480 | 2502 | 240 | Design issue fee | |
| 1503 | 640 | 2503 | 320 | Plant issue fee | |
| 1460 | 130 | 1460 | 130 | Petitions to the Commissioner | |
| 1807 | 50 | 1807 | 50 | Petitions related to provisional applications | |
| 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | |
| 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 | 770 | 1809 | 385 | Filing a submission after final rejection (37 CFR 1.129(a)) | |
| 1810 | 770 | 2810 | 385 | For each additional invention to be examined (37 CFR 1.129(b)) | |

Other fee (specify) _____

*Reduced by Basic Filing Fee

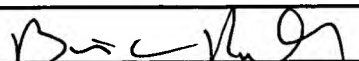
SUBTOTAL (3)

\$ 0

SUBMITTED BY

Typed or Printed Name Brian C. Kunzler

Signature



Date

Mar 29, 2004

Complete (if applicable)

Reg. Number

38,527

Deposit Account User ID

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents and Trademarks, Mail Stop Assignments, P.O. Box 1450, Alexandria, VA 22313-1450.

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

"Express Mail" Mailing Label No.: ER730013072US

Date of Deposit: March 29, 2004

I hereby certify that this patent application in the name of John G. Thompson for
MIRRORED VOLUME REPLICATION METHOD, APPARATUS, AND SYSTEM, together
with the drawings, a Declaration, Power of Attorney, and Petition, an Assignment and
Recordation Form Cover Sheet, Information Disclosure Statement, PTO Form 1449, and Copies
of Cited References are being deposited with the United States Postal Service "Express Mail Post
Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above in an envelope
addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450,
Alexandria, VA 22313-1450.

Respectfully submitted,



Brian C. Kunzler
Reg. No. 38,527
Attorney for Applicant

Date: March 29, 2004

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